<u>CLAIMS</u>

I claim:

5   1.   A system comprising:
          ;a security management system comprising:
               a network security feedback and control
          system wherein said security feedback and
          control system receives a plurality of
10   normalized events and issues at least one
          normalized command in response to a
          predefined event in said plurality of
          normalized events.

15   2.   The system of Claim 1 wherein said network
     security feedback and control system comprises:
               a feedback and control manager wherein said
          feedback and control manager processes said at
          least one normalized event and generates said at
20   least one normalized command.

     3.   The security management system of Claim 2
     wherein said feedback and control manager includes at
     least one rules engine wherein said rules engine
25   includes a rule having a condition object that uses
     information from said at least one normalized event.

     4.   The system of Claim 1 further comprising:
               a managed node coupled to said security
30   management system.

     5.   The system of Claim 4 wherein said managed
     node further comprises:
               a security management agent executing on said
35   managed node.

6.   The system of Claim 5 further comprising:

at least one managed product coupled to said security management agent wherein said at least one managed product forwards at least one of said normalized events to said security management agent and receives normalized commands from said security management agent.

7.   The system of Claim 1 further comprising:

a security management agent coupled to said network security feedback and control system wherein said security management agent collects normalizes events and forwards said normalized events to said security management system.

8.   The system of Claim 7 further comprising:

at least one managed product coupled to said security management agent wherein said at least one managed product transfers at least one normalized event to said security management agent.

9.   A system comprising:

an event subscription filter;

a feedback and control manager coupled to said event subscription filter.

10. The system of Claim 9 further comprising:

a knowledge database coupled to said feedback and control manager.

11.   The system of Claim 9 further comprising:

a directory coupled to said feedback and control manager.

12.   The system of Claim 11 further comprising:

a configuration adapter connected between said feedback and control manager and said directory.

5   13.   The system of Claim 9 wherein said feedback and control system further comprises a rules engine coupled to said event subscription filter.

14.   The system of Claim 9 further comprising:

10   a security management agent coupled to said event subscription filter.

15.   The system of Claim 14 further comprising: at least one managed product coupled to said

15   security management agent

16.   A method comprising:
receiving events from managed products by a network security feedback and control system; and

20   using information in said events by said network feedback and control system in dynamically implementing a predefined security policy.

17.   A computer-program product comprising a

25   computer-readable medium containing computer program code for a method comprising:
receiving events from managed products by a network security feedback and control system; and using information in said events by said

30   network feedback and control system in dynamically implementing a predefined security policy.

18.   A structure comprising:

means for receiving events from managed products by a network security feedback and control system; and

5   means using information in said events by said network feedback and control system in dynamically implementing a predefined security policy.

19. A method comprising:

10   collecting events, from a plurality of managed products in a first tier, in a second tier object;

forwarding said events to a third tier object; and

15   routing said events to an event sink in said third tier object for processing.

20. The method of Claim 19 wherein said event sink comprises a security feedback and control system.

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21. The method of Claim 19 wherein said second tier object comprises a security management agent.

22. The method of Claim 19 wherein said third

25 tier object comprises a security management server.

23. A computer-program product comprising a computer-readable medium containing computer program code for a method comprising:

30   collecting events, from a plurality of managed products in a first tier, in a second tier object;

forwarding said events to a third tier object; and

35   routing said events to an event sink in said third tier object for processing.

24. A structure comprising:

means for collecting events, from a plurality
of managed products in a first tier, in a second

5   tier object;

means for forwarding said events to a third
tier object; and

means for routing said events to an event
sink in said third tier object for processing.

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25. A method comprising:

collecting security events having predefined
structures from a plurality of managed products by
a security management agent;

15   forwarding said security events to a security
management system upon a connection to said
security management system being available; and

forwarding said security events to a network
management application upon said connection to

20   said security management system being unavailable.

26. A computer-program product comprising a
computer-readable medium containing computer program
code for a method comprising:

25   collecting security events having predefined
structures from a plurality of managed products by
a security management agent;

forwarding said security events to a security
management system upon a connection to said

30   security management system being available; and

forwarding said security events to a network
management application upon said connection to
said security management system being unavailable.

35   27. A structure comprising:

means for collecting security events having predefined structures from a plurality of managed products by a security management agent;

means for forwarding said security events to a security management system upon a connection to said security management system being available; and

means for forwarding said security events to a network management application upon said connection to said security management system being unavailable.

28. A method comprising:

issuing a command for a security managed product wherein said issuing said command is performed on a first computer system;

pinging a security management agent following said issuing said command wherein said security management agent is executing on a second computer system coupled to said first computer system; and

downloading said command securely by said security management agent following said pinging said security management agent.

29. A computer-program product comprising a computer-readable medium containing computer program code for a method comprising:

issuing a command for a security managed product wherein said issuing said command is performed on a first computer system;

pinging a security management agent following said issuing said command wherein said security management agent is executing on a second computer system coupled to said first computer system; and

downloading said command securely by said
security management agent following said pinging
said security management agent.

5   30.   A structure comprising:
          means for issuing a command for a security
managed product wherein said issuing said command
is performed on a first computer system;
          means for pinging a security management agent
10   following said issuing said command wherein said
security management agent is executing on a second
computer system coupled to said first computer
system; and
          means for downloading said command securely
15   by said security management agent following said
pinging said security management agent.

     31.   A method comprising:
          specifying a plurality of hierarchical
20   security event structures for use by heterogeneous
security managed products; and
          including in said plurality of hierarchical
event structures information for security
management of said heterogeneous security managed
25   products.

     32.   The method of Claim wherein 31 said plurality
of hierarchical security event structures includes a
security base event structure.
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     33.   The method of Claim 32 wherein said security
base event structure includes an event identifier
field.

34. The method of Claim 32 wherein said security base event structure includes a software feature identifier field.

5   35. The method of Claim 32 wherein said security base event structure includes a severity field.

36. The method of Claim 32 wherein said security base event structure includes a category field.

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37. A computer-program product comprising a computer-readable medium containing computer program code for a method comprising:

    specifying a plurality of hierarchical

15   security event structures for use by heterogeneous security managed products; and

    including in said plurality of hierarchical event structures information for security management of said heterogeneous security managed

20   products.

38. A structure comprising:

    means for specifying a plurality of hierarchical security event structures for use by

25   heterogeneous security managed products; and

    means for including in said plurality of hierarchical event structures information for security management of said heterogeneous security managed products.

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39. A memory structure comprising:

    a security event structure including:

        an event identifier field;

        an event class identifier field; and

35   a category field.

40.   The memory structure of Claim 39 wherein said
security event structure further comprises:
     a severity field.

5   41.   The memory structure of Claim 39 wherein said
security event structure further comprises:
     a software feature identifier field.

42.   The memory structure of Claim 39 wherein said
10   security event structure is a base event structure.

43.   The memory structure of Claim 39 wherein said
security event structure is an application update event
structure.
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44.   The memory structure of Claim 39 wherein said
security event structure is a configuration update
event structure.

20   45.   The memory structure of Claim 39 wherein said
security event structure is a definition update event
structure.

46.   The memory structure of Claim 39 wherein said
25   security event structure is a network event structure.

47.   The memory structure of Claim 39 wherein said
security event structure is an instruction event
structure.
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48.   The memory structure of Claim 39 wherein said
security event structure is a host instruction event
structure.

49. The memory structure of Claim 39 wherein said security event structure is a network instruction event structure.

5   50. The memory structure of Claim 39 wherein said security event structure is a network firewall event structure.

51. The memory structure of Claim 39 wherein said
10   security event structure is a firewall connection statistics event structure.

52. The memory structure of Claim 39 wherein said security event structure is a data scan event
15   structure.

53. The memory structure of Claim 39 wherein said security event structure is a data incident event structure.
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54. The memory structure of Claim 39 wherein said security event structure is a data virus incident event structure.

25   55. The memory structure of Claim 39 wherein said security event structure is an advisory malware event structure.

56. The memory structure of Claim 39 wherein said
30   security event structure is an malware activity event structure.

57. A method comprising:
       collecting security events having predefined
35   structures from a plurality of managed products by
       a security management agent; and

queuing said security events by said security
management agent.

58.   The method of Claim 57 further comprising:
5   transferring queued security events upon a
predefined criterion being true.

59.   The method of Claim 58 wherein said
predefined criterion comprises a queue flush time.
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60.   The method of Claim 58 wherein said
predefined criterion comprises a queue flush size.

61.   The method of Claim 58 wherein said
15 predefined criterion comprises a queue flush count.

62.   The method of Claim 57 wherein said queuing
said security events further comprises:
          queuing only security events not marked as
20   alert events.

63.   The method of Claim 57 wherein said queuing
said security events further comprises:
          queuing all of said security events in a
25   single queue.

64.   The method of Claim 57 wherein said queuing
said security events further comprises:
          queuing said security events in a plurality
30   of queues.

65.   A computer-program product comprising a
computer-readable medium containing computer program
code for a method comprising:

collecting security events having predefined structures from a plurality of managed products by a security management agent; and

queuing said security events by said security

5   management agent.

66.   A structure comprising:

means for collecting security events having predefined structures from a plurality of managed

10   products by a security management agent; and

means for queuing said security events by said security management agent.

67.   A method comprising:

15   collecting security events having predefined structures from a plurality of managed products by a security management agent;

queuing only security events of said security that are not alert events

20   transferring said alert events to an output buffer without queuing said alert events.